Barrier device

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Abstract of **US5710552**

A barrier device threadably mounts to a cabling aperture on a field mounted transmitter. The field mounted transmitter receives and transmits signals, and is wholly powered by a current loop circuit. The barrier device has a conductive housing with at least a first and a second aperture and a pair of conductors passing through the first aperture of the barrier device, for connecting to a terminal block in the transmitter. A pair of signal terminals, preferably as ring tongue lug, is mounted in the second aperture of the barrier device. The signal terminals are connectable to a handheld communicator, which is used to calibrate, monitor and test the transmitter. A barrier circuit is mounted in the housing and is electrically connected between the signal terminals and the conductors. Signals from the communicator access the terminal block through the barrier circuit, and the barrier circuit limits the power available at the signal terminals. One embodiment of the barrier device has a third aperture directly across from the first aperture. The first aperture threadably connects to the transmitter, so that cabling from the transmitter can pass through a passageway formed between the first and third apertures. Another embodiment has a stub shaped housing, with one end of stub being the first aperture, and the other end being the second aperture. The first aperture threads to the cabling aperture on the transmitter, and the barrier circuit is potted in the stub shaped housing.